



STATE OF MARYLAND

# DMMH

Maryland Department of Health and Mental Hygiene  
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

**Office of Preparedness & Response**

Sherry Adams, R.N., C.P.M., Director

Isaac P. Ajit, M.D., M.P.H., Deputy Director

**March 12, 2010**

## Public Health & Emergency Preparedness Bulletin: # 2010:09 Reporting for the week ending 03/06/10 (MMWR Week #09)

### CURRENT HOMELAND SECURITY THREAT LEVELS

**National:** Yellow (ELEVATED) \*The threat level in the airline sector is Orange (HIGH)  
**Maryland:** Yellow (ELEVATED)

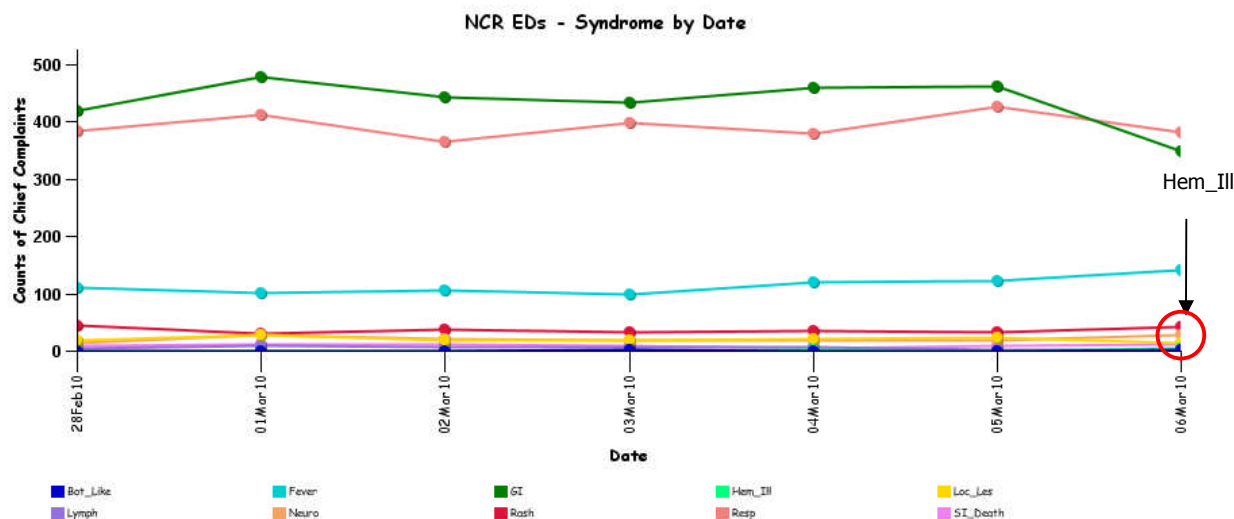
### SYNDROMIC SURVEILLANCE REPORTS

**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled.

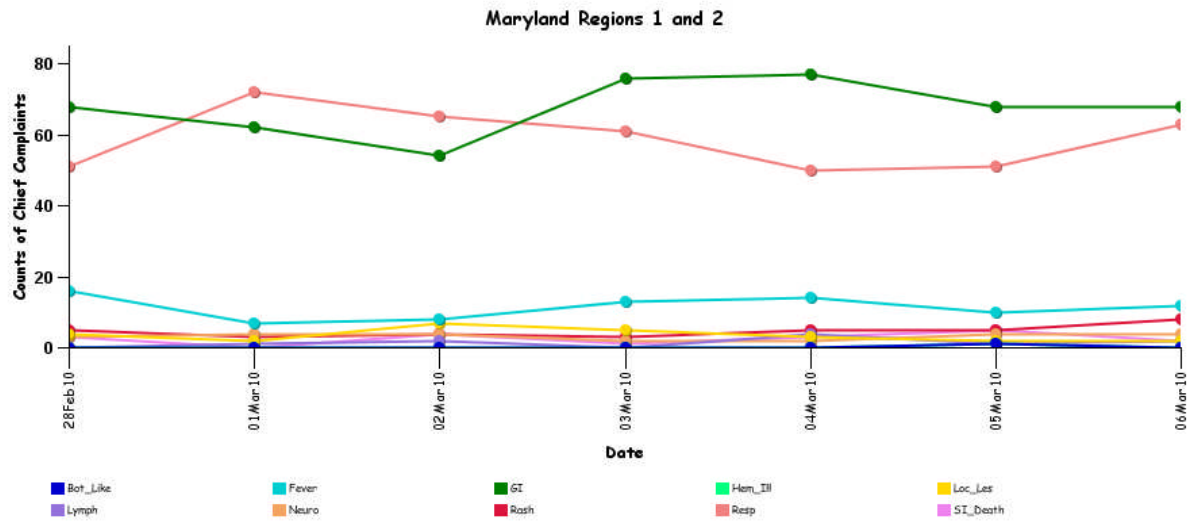
Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

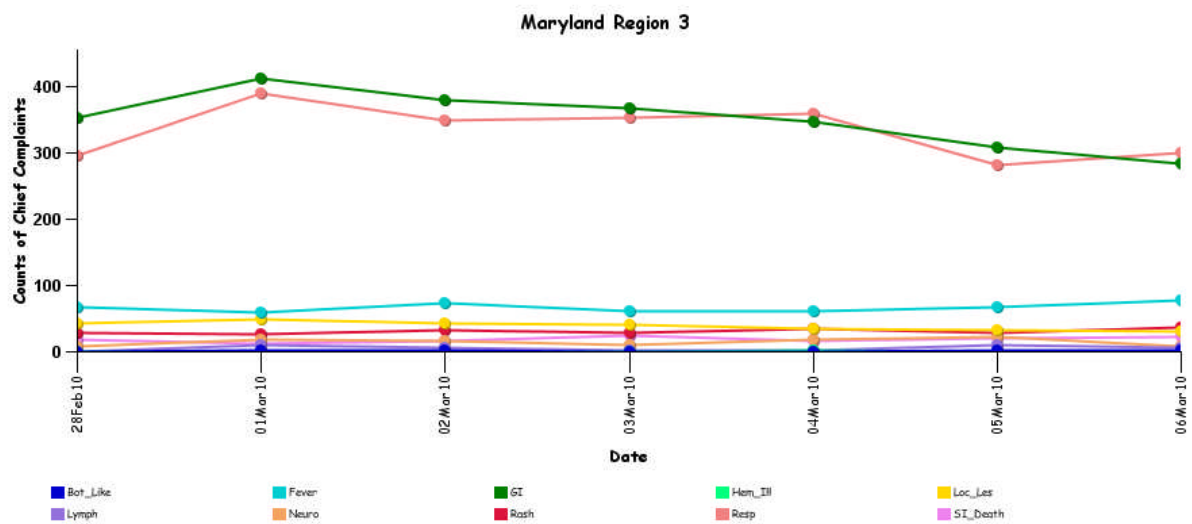


\* Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

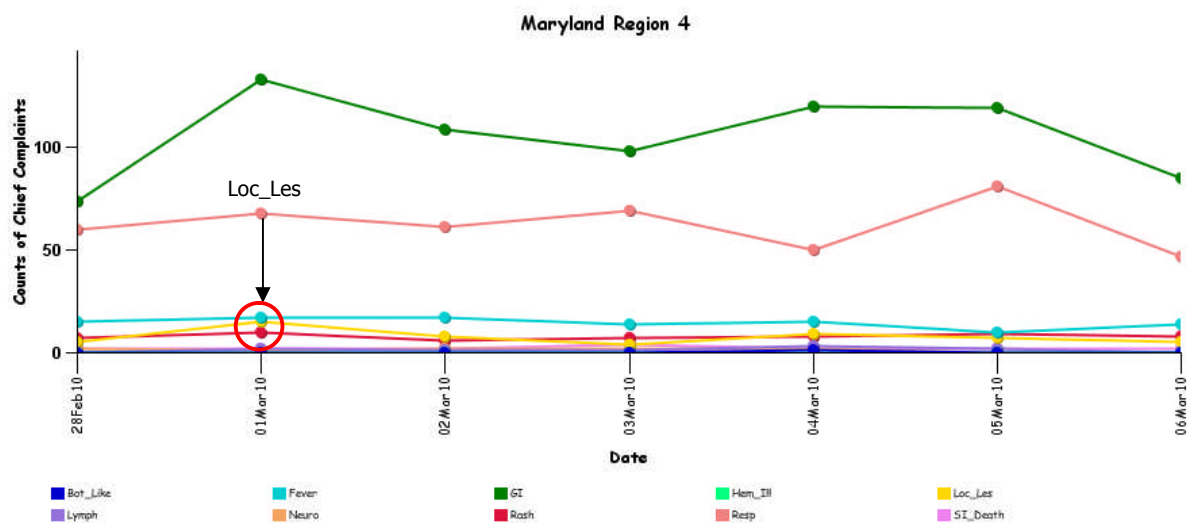
## MARYLAND ESSENCE:



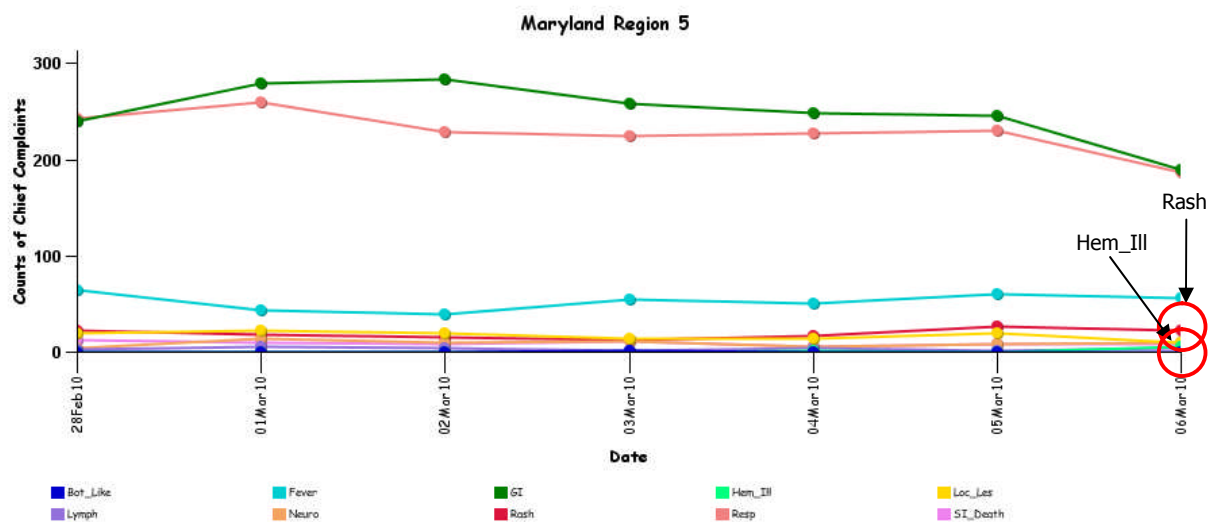
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



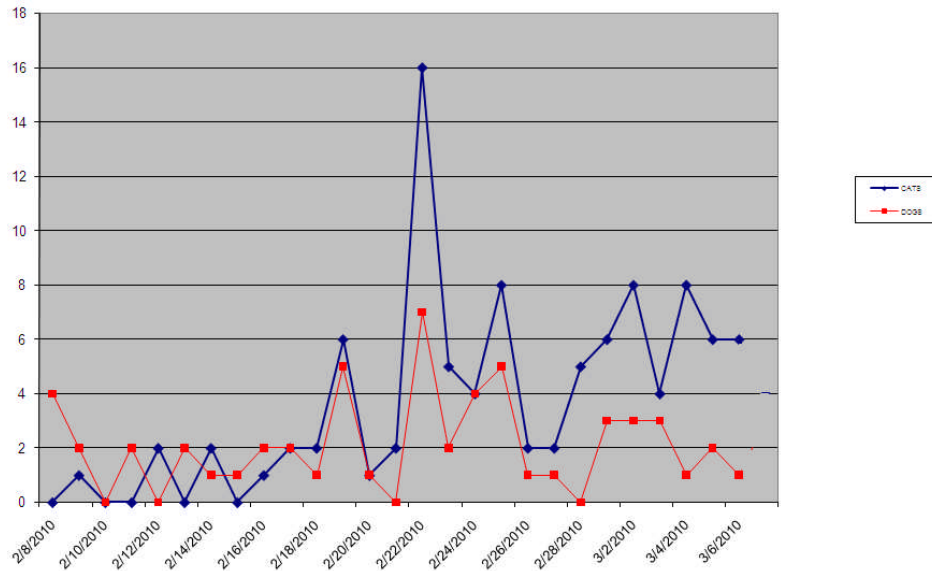
\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

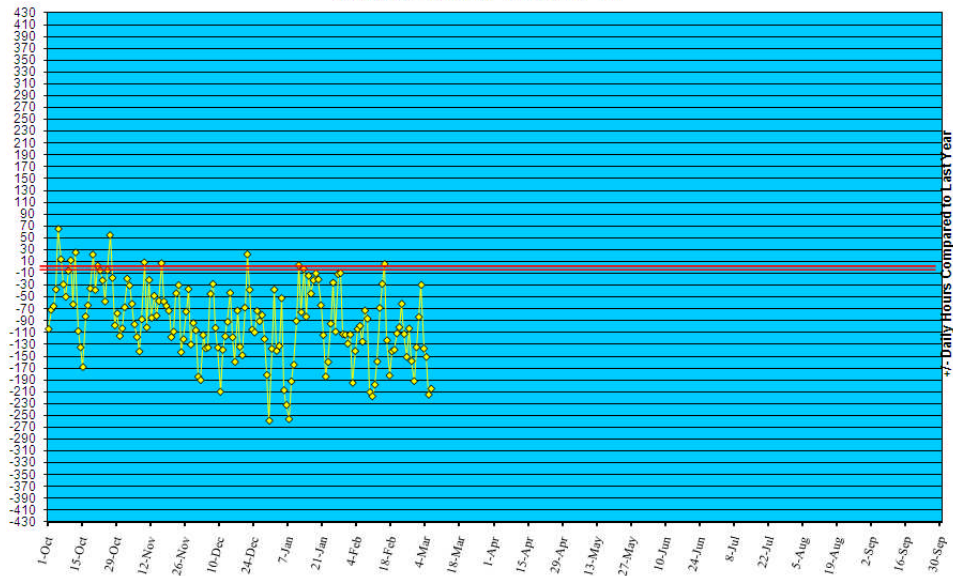
Dead Animal Pick-Up Calls to 311



#### REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/09.

Statewide Yellow Alert Comparison  
Daily Historical Deviations  
October 1, '09 to March 6, '10



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2010 did not identify any cases of possible public health threats.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (Feb 28- March 6, 2010):	05	0
Prior week ((Feb 21- Feb 27, 2010):	03	0
Week#09, 2009 (March 01- March 07, 2009):	11	0

**13 outbreaks were reported to DHMH during MMWR Week 9 (February 28-March 6, 2010)**

### **10 Gastroenteritis outbreaks**

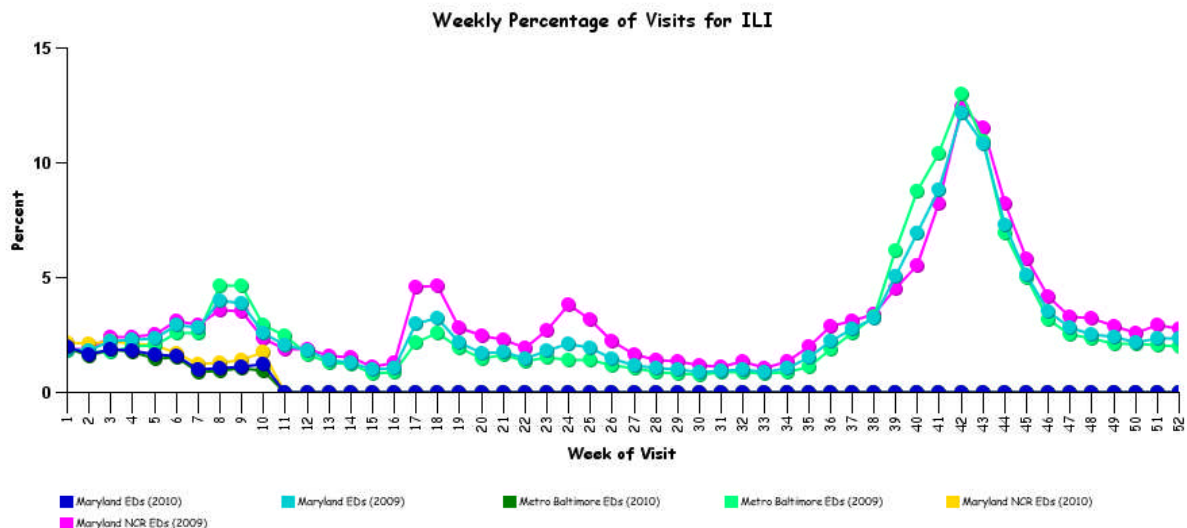
6 outbreaks of GASTROENTERITIS in Nursing Homes  
1 outbreak of GASTROENTERITIS in an Assisted Living Facility  
2 outbreaks of GASTROENTERITIS in Schools  
1 outbreak of GASTROENTERITIS in a Daycare

**MARYLAND INFLUENZA STATUS:** Influenza activity in Maryland for Week 09 is SPORADIC.

## **SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS**

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



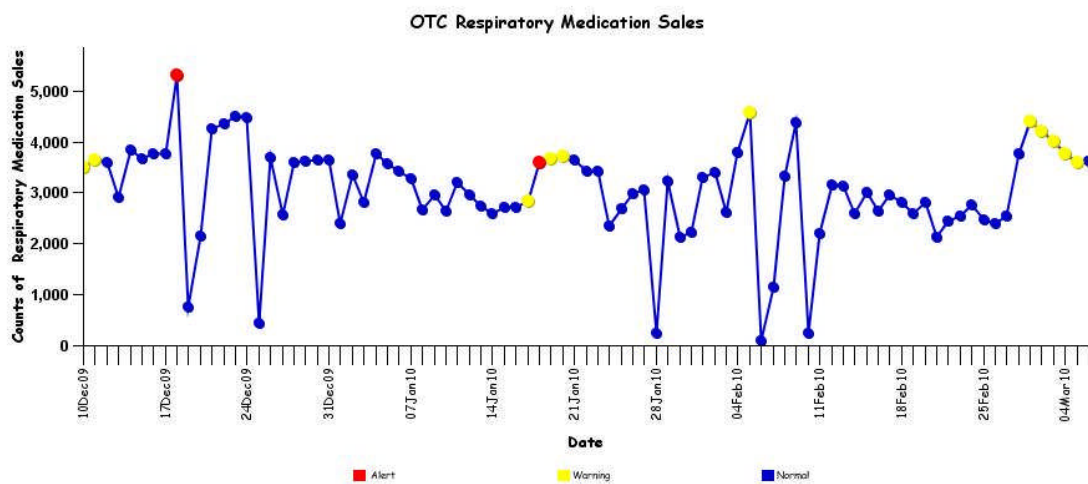
\* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



\*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



## **PANDEMIC INFLUENZA UPDATE:**

**WHO Pandemic Influenza Phase:** Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

**US Pandemic Influenza Stage:** Stage 0: New domestic animal outbreak in at-risk country

**\*\*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**  
[http://preparedness.dhmm.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex\(Vers7.2\).pdf](http://preparedness.dhmm.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex(Vers7.2).pdf)

## **AVIAN INFLUENZA-RELATED REPORTS:**

**WHO update:** As of March 04, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 486, of which 287 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

**AVIAN INFLUENZA (VIET NAM):** 05 March 2010, A fresh outbreak of avian flu (A/H5N1) has been reported in central Khanh Hoa Province, killing nearly 10 000 birds. Affected areas have been decontaminated and poultry incinerated, said a spokesperson from the provincial Animal Health Unit. The latest outbreak has brought the number of provinces affected by the flu to 6: Dien Bien, Nam Dinh, Nghe An, Khanh Hoa, Soc Trang and Ca Mau, said Hoang Van Nam from the Ministry of Agriculture and Rural Development. The bird flu epidemic has continued to spread in these provinces, killing thousands of poultry since it re-emerged last December [2009] despite efforts to prevent contagion. Last December [2009], nearly 6000 birds were contaminated with A/H5N1 in southernmost Ca Mau Province alone. Infections spread to 2 more communes of the province this week [week of 1 Mar 2010], causing 600 affected birds to be culled and raising the total number of affected communes to 10. There is a high risk of the flu spreading to other localities, especially in the Mekong Delta region as ducks migrated during harvest time, said Nam. The ministry urged the provinces to increase efforts to combat and prevent the spread of the flu, and ensure more monitoring of transportation and poultry slaughterhouses, he added. The province's poultry flocks would continue to be vaccinated although it was necessary for households to co-operate with authorities to inform them about their poultry stocks to ensure timely vaccinations. Over the last 2 weeks, 3 people from the provinces of Tuyen Quang in the north, Tien Giang in the south, and Khanh Hoa in the central were diagnosed with A/H5N1. One of the infected, a 38-year-old woman from Tien Giang Province, died from the flu.

**AVIAN INFLUENZA, HUMAN (EGYPT):** 04 March 2010, The Ministry of Health of Egypt has announced 5 new cases of human H5N1 avian influenza infection. The 1st case is a 53-year-old male from Shobra Elkhima district, Qaliobia Governorate. He developed symptoms on 27 Feb 2010 and was hospitalized on 27 Feb 2010, where he received oseltamivir treatment. He is in a critical condition. The 2nd case is a one-year-old male from Banha district, Qaliobia Governorate. He developed symptoms on 22 Feb 2010 and was hospitalized on 23 Feb 2010, where he received oseltamivir treatment. He is in a stable condition. The 3rd case is a 10-year-old male from Meet Ghamr district, Dakalia Governorate. He developed symptoms on 10 Feb 2010 and was hospitalized on 14 Feb 2010, where he received oseltamivir treatment. He is in a moderate condition. The 4th case is a 30-year-old female from Kellin District, Kafr El-Sheik Governorate. She developed symptoms on 10 Feb 2010 and was hospitalized on 11 Feb 2010, where she received oseltamivir treatment. She is in stable condition. The 5th case is a 13-year-old male from Kafr El-Sheik District, Kafr El-Sheik Governorate. He developed symptoms on 10 Feb 2010 and was hospitalized on 14 Feb 2010, where he received oseltamivir treatment. He is in stable condition. Investigations into the source of infection indicated that the 5 cases had exposure to sick and dead poultry. The cases were confirmed by the Egyptian Central Public Health Laboratories, a National Influenza Center of the WHO Global Influenza Surveillance Network (GISN). Of the 104 laboratory confirmed cases of avian influenza A(H5N1) reported in Egypt, 30 have been fatal.

**AVIAN INFLUENZA, HUMAN (VIET NAM):** 02 March 2010, Bird flu [avian influenza (H5N1) virus infection] has infected a young woman in the northern province of Tuyen Quang, the 3rd case this year in Viet Nam. On Mon 1 Mar 2010, the Ministry of Health announced a 17-year-old girl had tested positive for the bird flu [avian influenza (H5N1)] virus in Tuyen Quang province in Son Duong district. The girl had experienced high fever, cough and sore throat on 19 Feb 2010, and then was treated in the district General Hospital on 24 Feb 2010. Doctors suspected she had bird flu and gave her Tamiflu. Experts said chickens at the girl's house had died suddenly 10 days before and the girl had destroyed the whole flock. The country has reported 3 cases of avian flu since 1 Jan 2010, including one death -- a woman in the Mekong Delta province of Tien Giang. Recent outbreaks in poultry flocks in the Mekong Delta province of Ca Mau have caused alarm in the Delta, so the Deputy Minister of Agriculture and Rural Development Diep Kinh Tan held talks with the provincial leaders of Ca Mau and Bac Lieu on [Mon 1 Mar 2010]. The outbreaks occurred in Ca Mau town and districts of Tran Van Thoi and U Minh in late February [2010]. Tests showed the chickens were positive for the disease and around 5500 birds were destroyed. On the same day, the deputy chairman of Khanh Hoa's People's Committee, Nguyen Chien Thang, announced 2 outbreaks of bird flu in district Ninh Hoa and Van Ninh. Waterfowls have died in scattered farms in the 2 districts. Most of samples tested positive for the disease. Veterinarians have disinfected the areas and killed around 9378 animals.



### **H1N1 INFLUENZA (Swine Flu):**

**INFLUENZA PANDEMIC (H1N1), CHINA UPDATE:** 03 March 2010, The pandemic A (H1N1) influenza outbreak, which has killed nearly 800 people on the Chinese mainland, has passed its peak in the autumn-winter flu season, the Ministry of Health said Tuesday [2 Mar 2010]. The mainland saw a sharp drop in the proportion of A/H1N1 in all flu cases, down from 36.6 percent in January 2010 to 11.1 percent last month [February 2010], the Ministry said in a report posted on its website. The disease had killed 793 people by 28 Feb 2010, including 18 last month, according to the report. Experts spotted no mutations in the virus, and an estimated 30 percent of the population had immunity against the strain, the report said. The Ministry, however, warned that though a pandemic was unlikely to occur in the near future, localized spreading of the disease could not yet be ruled out, especially in crowded public venues such as schools. The Ministry said flu prevention measures should not be eased as the population still had limited access to immunization against the A/H1N1 flu strain. As of 28 Feb 2010, more than 82 million Chinese people had been inoculated with the A/H1N1 flu vaccine, according to the report.

#### **Resources:**

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmm.maryland.gov/swineflu/>

### **NATIONAL DISEASE REPORTS**

No new disease outbreaks related to CDC Critical Biological Agents were reported for MWWR week 09.

### **INTERNATIONAL DISEASE REPORTS**

**ANTHRAX, HUMAN, BOVINE (PHILIPPINES):** 04 March 2010, President Gloria Macapagal-Arroyo ordered the Department of Health (DOH) to assist local government units (LGUs) in attending to the anthrax cases in Cagayan as they investigate how the disease spread after it has already downed 400 persons and killed one victim. Deputy Presidential Spokesman Gary Olivar said the President also directed the Department of Agriculture (DA) to assess the extent of the anthrax problem [and] its effect on animals. Olivar added that, at present, anthrax is endemic in Lasam in Cagayan and the nearby areas. He added that initial reports showed that the anthrax was found in soil "as spores and herbivores like carabaos get sick from it." He said Lasam had reported that there are at least 405 suspected cases of anthrax. "The DOH team is now investigating the outbreaks. Initial reports traced the source from sick and dying carabaos, possibly from anthrax. Person-to-person transmission is rare. Quarantine of cases is not required. Treatment is with ciprofloxacin," Olivar said, quoting a DOH report. Cagayan provincial health chief Dr. Danilo Alnozo said of the 400 cases they are handling, only 13 remain under observation at the Cagayan Valley Medical Center, while one person died of a heart attack which was aggravated by anthrax. The victims reportedly got the disease after eating the meat of a dead carabao. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**CHIKUNGUNYA (TAIWAN ex INDONESIA):** 02 March 2010, Taiwan Centers for Disease Control (TCDC) announced that 3 imported cases of chikungunya [virus infection] had been confirmed this year [2010]. The age of the cases ranged from 5-27 years; 2 were male. Their disease onsets were between 2 and 22 Feb [2010]. All cases were found through fever screen when they landed at the airport. The cases came from Jakarta, Sumatra, and Surabaya, Indonesia. During the same period in 2008 and 2009, only one case each from Indonesia and Malaysia were reported. Since chikungunya [disease] became a category 2 notifiable disease on 15 Oct 2007, by the end of 2009, a total of 20 cases were confirmed. All were imported. Of these, 18 were found through fever screening, one found through routine testing by the TCDC reference laboratory, and one was reported by a hospital. The majority of the cases came from Indonesia (9 cases) and Malaysia (5 cases). (Emerging Infectious Disease is listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

**ANTHRAX (UK):** 02 March 2010, British health authorities repeated a warning to drug users on Monday [1 mar 2010] that a batch of heroin contaminated with anthrax was probably circulating in Europe, posing a potentially serious health threat. The Health Protection Agency [HPA] said a 2nd case of anthrax had been confirmed in an injecting heroin user in London, adding to 2 previous cases in England, 24 in Scotland, and one in Germany. A total of 12 people [England (1), Scotland (10), Germany (1)] have died in Europe of anthrax infection since the 1st cases emerged in Scotland in December [2009]. European health authorities said in January [2010] they believed a batch of heroin was circulating in the region that had been contaminated with anthrax. Experts have said the heroin is unlikely to have been deliberately contaminated. Rachel Heathcock from the London branch of the HPA stressed there was no evidence of person-to-person transmission in any of the recent anthrax cases and the risk to the general population, including those close to infected patients, was "negligible." "It is extremely rare for anthrax to be spread from person to person," she said in a statement [it is essentially non-contagious. - Mod.MHJ] Lindsey Davies, a director of public health for the British capital, said heroin users needed to be aware of the risks. "I urge all heroin users in London to be extremely alert to the risks and to seek urgent medical advice if they experience signs of infection such as redness or swelling at or near an injection site or other symptoms... such a high temperature, chills, or a severe headache," she said in a statement. "This is a very serious infection for drug users," she added. "Early antibiotic treatment can be lifesaving." The European Center for Disease Prevention and Control (ECDC), which monitors health in the European Union, said last month [February 2010] that other EU countries may be at risk. "Considering the complex international distribution chain of heroin and the link among cases in Scotland and Germany, the



exposure to a contaminated batch of heroin distributed in several EU member states is probable," it said on its website. But it added that it was also possible the German and English cases are due to small amounts of heroin originating from Scotland, "in which case other EU member states than UK and Germany might not be affected." (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**CHIKUNGUNYA (MADAGASCAR):** 01 March 2010, On 10 Feb [2010], after observing an increase in the number of dengue-like syndromes at the primary health care in Mananjary (Vatovavy-Fitovinany) [Fianarantsoa province], the health district medical officer shipped 11 specimens to the National Reference Laboratory (NRL) at the Institut Pasteur from Madagascar for arboviruses analysis. On 11 Feb 2010, by RT-PCR and after isolation on AP61 cell line, viral RNA from chikungunya virus (CHIKV) was detected in all specimens. NRL sent an alert to the Ministry of Health (MoH). A team composed of staff from MoH, WHO, and Institut Pasteur from Madagascar (epidemiologist and entomologist) went to Mananjary for investigation. Specimens from 91 outpatients with dengue-like syndromes were collected as well as larvae of mosquitoes. As of 24 Feb [2010], NRL detected CHIKV in 95 out of 102 sera. Health authorities said that the total number of suspected cases is 1507 representing 58 percent of total consultant [patients]. 4 other cities close to Mananjary had confirmed and suspected cases. Health authorities and technical partners are following closely the situation in affected district but also in neighboring districts. (Emerging Infectious Disease is listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

**ANTHRAX, WILDLIFE (INDIA):** 01 March 2010, Tests conducted on carcasses of wild boars found on the premises of the Kerala Police Academy [in Thrissur] have confirmed anthrax. Carcasses of 7 wild boars, an eagle, and a toddy cat were found on the campus of the academy at Ramavarnapuram, a part of which has thick vegetation. Some of the carcasses were reportedly 2 to 3 months old. Others were 2 or 3 weeks old. District Medical Officer V Divakaran said that tests conducted at the Kerala Agricultural University's College of Veterinary and Animal Sciences on carcasses revealed the animals had anthrax. A meeting was held at the academy on Thursday [25 Feb 2010] to formulate measures to tackle the problem. The District Medical Officer; Divisional Forest Officer ML Thomas; District Veterinary Chief Officer Sanil V Cheeran; and officials of the academy took part in it. Later, the carcasses were burnt. The meeting said that animals within a few kilometres from the academy would be immunised if further cases were reported. Confirmation of anthrax in the area is a cause for concern as the academy also houses the police kennel unit. Cases of anthrax in dogs, however, were rare, according to Aravind Ghosh, professor and head of the College of Veterinary Science Hospital. Steps have been taken to prevent transmission of the disease," Dr Divakaran said. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

#### **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: [www.tinyurl.com/flu-enroll](http://www.tinyurl.com/flu-enroll)

\*\*\*\*\*

**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Sadia Aslam, MPH  
Epidemiologist  
Office of Preparedness and Response  
Maryland Department of Health & Mental Hygiene  
300 W. Preston Street, Suite 202  
Baltimore, MD 21201  
Office: 410-767-2074  
Fax: 410-333-5000  
Email: [SAslam@dhmm.state.md.us](mailto:SAslam@dhmm.state.md.us)